

**BY ORDER OF THE COMMANDER
AIR FORCE MATERIEL COMMAND**



**AIR FORCE INSTRUCTION 11-202,
VOLUME 3**

**AIR FORCE MATERIEL COMMAND
Supplement 1**

2 JULY 2002

Flying Operations

GENERAL FLIGHT RULES

"HOLDOVER"

"The basic publication has changed; impact on supplemental information is under review by the OPR. Users should follow supplemental information that remains unaffected."

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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AFI 11-202, Volume 3, 9 February 2001, is supplemented as follows:

This document supplements AFI 11-202, Volume 3 and applies to all AFMC flying activities with primary aircrew assigned or attached for flying. This supplement does not apply to the Air National Guard or the US Air Force Reserve units and members except those under AFMC OPCON.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

1.2.1.2. (Added) AFMC produces a three-volume set of Flight test (FT) instructions containing attachments for each weapon system flown in AFMC. These instructions are numbered AFI 11-2FT Volume 1, 2, and 3, and will contain the training, evaluation criteria, and operations procedures, respectively, for each weapon system. AFMC uses these instructions in lieu of AFI 11-2 MDS-specific Volumes for flying operations. In the absence of published guidance, AFMC units will coordinate with HQ AFMC/DOV for approval of locally developed guidelines. If possible, these guidelines should be consistent with similar guidance specified in the appropriate AFI 11-2 MDS-specific Lead MAJCOM Volumes. In addition, aircraft on loan to AFMC undergoing short-term flight test programs will be flown according to the lead MAJCOM guidance if no AFMC guidance exists.

1.2.2.3. (Added) AFMC flying units may supplement only AFI 11-2FT Vol 3, *AFMC Flight Procedures*, to incorporate additional aircrew procedures. Send unit supplements to HQ AFMC/DOV, 508 W Choctawhatchee Ave, Suite 4, Eglin AFB FL 32542-5713, for review and approval prior to publication. Include AFMC/DOV and AFMC/DOO on the distribution list for approved supplements to AFI 11-2FT Vol 3.

1.3. **Waivers.** HQ AFMC/DOV is waiver authority for this supplement. Route requests through chain of command to flying unit commanders prior to submission to HQ AFMC/DOV. Send waiver requests to HQ AFMC/DOV, 508 W Choctawhatchee Ave, Suite 4, Eglin AFB FL 32542-5713 for review and approval.

1.6. **Improvement Recommendations.** Send AF Forms 847 to HQ AFMC/DOV for coordination.

2.1.2.1.1. (Added) Flights to DoD and joint-use airfields within the CONUS. For flights originating and terminating at DoD or joint-use installations within the CONUS, an ASRR review is not required.

2.1.2.1.2. (Added) Flights to non-DoD/joint use airfields (including all overseas airfields). For flights originating or terminating at civil airfields (other than joint-use), consult both the ASRR and Global Decision Support System (GDSS) databases for additional flight planning information, airfield suitability, obstruction data, and restrictions. General ASRR restrictions (example: day only, VMC only, etc.) are applicable to all AFMC operations. Aircraft-specific restrictions apply to AFMC users of like aircraft. Where advisements are specified, contact HQ AFMC/DOV.

2.1.2.1.3. (Added) Waivers to ASRR Restrictions. ASRR waiver authority is AFMC/DOV.

2.1.2.2. Units will ensure the ASRR is available to aircrews, mission planners, and other personnel as required.

2.1.2.3. Units will establish procedures to ensure personnel are properly trained on how to access and use the ASRR.

2.1.3.1. (Added) Carry sufficient maps, charts, and flight information publications (FLIP) to navigate for both the planned IFR and VFR phases of flight. For local flights, detailed aircrew aids that contain this information are sufficient.

2.1.3.2. (Added) Inflight Manuals/Directives. The PIC will ensure that applicable flight manuals, checklists, and mission related directives (if required) for all mission required crew positions will be carried in flight. The Director of Flight Operations (DFO) will determine required mission directives. For aircraft lacking adequate storage space, only checklists are required for each crew position.

2.2.3. Refer to AFI 11-2FT Vol3 for specific fuel requirements.

2.2.3.3. Holding (instead of an alternate airport) is authorized for a remote or island destination when the requirements of para **8.4.3.**, as supplemented, are met.

2.2.4.2. The DFO may permit the use of a unit-developed flight log. Submit unit-developed forms to HQ AFMC/DOV for approval.

2.2.4.4. Refer to AFI 11-2FT Vol3 and the MDS specific attachments for approved flight planning software. AFMC crewmembers are responsible for ensuring correct entry of flight planning data.

2.3.1.2. When military weather service is not available or incomplete, aircrews will obtain weather by any means possible, to include foreign military, civilian Automatic Terminal Information Service, Flight Service Station, DUATS, through fixed base operators, etc.

2.4.2. Passenger briefing guide requirements are listed in AFI 11-2FT Vol 3.

2.5.1. Portable GPS Units (PGU) may be used on AFMC aircraft when the requirements of AFI 11-202v3 paragraph 5.8.3.3 are met in VMC. PGUs that have passed ASC/ENAE certification testing are approved for operation during any phase of flight. Devices, which have not been tested or fail certification testing, are not authorized for use in AFMC aircraft in IMC.

2.5.1.6. Forward all requests to use portable transmitting devices to HQ AFMC/DOV for approval. The request will contain a justification for use; information-demonstrating compliance with the Mil Standards as specified in Para. 2.5.1.3.1.2 this instruction, and the duration of the requirement.

2.5.4. Crewmembers will not wear pins, wigs, hair pieces, ornaments, barrettes, clips, earrings, and other fasteners made of leather, plastic, or metal while performing crew duties in or around the aircraft. Additionally, these items are prohibited for all occupants of ejection seat-equipped aircraft. Other items will be properly secured to minimize foreign object damage (FOD) risk. PICs will ensure that passengers wearing these items do not create a FOD hazard.

2.5.4.1. (Added) Crewmembers will not wear finger rings/scarves while performing crew duties in or around the aircraft.

2.6.1.3.1. (Added) Submit endorsement requests for single medium displays to HQ AFMC/DOV for coordination.

3.1.2.3. The AFMC Form 83, **Local Flight Clearance Authorization**, may be used for local area flights that terminate at the base of departure or at an installation under the operational control of the base of departure. For flights with intermediate stops or termination at other than the base of departure, an AFMC Form 82, **Flight Authorization**, will be used and a DD Form 175 or ICAO Form 1801 flight plan will be filed.

3.3. (Added) **Parachutist Manifests**. All parachutists will be listed on DD Form 2131, **Passenger Manifest**, or MAJCOM-approved form, AFMC Form 56, **Parachutist Jump Schedule**. Parachutists will provide the aircrew with a copy of the manifest or AFMC Form 56, and the aircrew will file this list with the mission paperwork.

4.3.6. (Added) For flights originating and terminating away from home base, the DFO will establish local aircrew reporting procedures to ensure monitoring of local and cross-country aircraft, crew status, location, and mission status. For flights originating or terminating OCONUS, DFOs will report aircrew and mission status to AFMC/DOO as soon as practical at DSN 257-8456/986-0082.

4.3.7. (Added) One-time flights of un-airworthy/crash-damaged aircraft to repair facilities require HQ AFMC/DO approval. Proposed flights with any engine inoperative or primary aircraft system affecting safety of flight completely inoperative, unless required under an approved test plan, require HQ AFMC/DO approval (for example, hydraulic, electrical, fuel, or flight control). Submit requests, including engineering analysis (if appropriate) and proposed flight restrictions to HQ AFMC/DOV for coordination.

4.7. (Added) **Aircraft Delivery**. AFMC depot aircrews will accomplish aircraft pickup and delivery to and from depot facilities, to the maximum extent unit mission requirements allow.

5.1.7. (Added) Any assigned, attached, or temporary duty aircrew member involved in a Class A or B mishap will be administratively grounded by the DFO immediately following the mishap. Any aircrew member involved in such a mishap will not perform aircrew duties in AFMC assigned aircraft until reauthorized in writing by AFMC/DO. Forward copies of all grounding actions to AFMC/DOV and coordinate all return to flying status actions through AFMC/DOV for AFMC/DO approval. Copies of all relative actions will be maintained in section four of affected individual's training folder.

5.8.1. RNAV systems installed during aircraft production or fleet-wide (TCTO) modification, conforming to the accuracy tolerances of FAA Advisory Circular 90-45A, 20-130A and 20-138, are approved for use in enroute operations. Installation and use of other RNAV systems requires coordination with the responsible Air Logistics Center (ALC). Engineering and certification authority for testbed aircraft resides with the contractor and/or responsible test organization.

5.8.2. Unit DFOs may authorize the accomplishment of self-contained approaches as part of an approved test plan or FCF profile. Flight conditions will be day VMC unless the approach is TERPS-certified according to para **8.3.1.1.4.**, this supplement.

5.8.3.1.1. Mission enhancement systems, when verified against other NAVAIDs, may be used to update the INS position for enroute instrument navigation.

5.8.3.2. GPS systems installed during aircraft production or fleet-wide (TCTO) modification, conforming to the requirements and specifications of FAA TSO C-129A, C-115, C-145 and C-146, are approved for IFR use in enroute operations. Installation and use of other GPS systems requires coordination with the responsible ALC. Engineering and certification authority for testbed aircraft resides with the contractor and/or responsible test organization.

5.8.3.3.4. Software developed for use with PGUs containing moving map displays requires HQ AFMC/DOV approval. Submit supporting documentation with the approval request.

5.8.3.3.4.1. (Added) Units will develop a training program tailored to the specific PGU that will be used. Document training completion on the applicable AFMC Form 67 and file in section four of the individual's training folder.

5.9.5.3. (Added) Helicopter Night Operations. The DFO may authorize helicopters on high priority operational or test missions to operate into and from unlighted areas as long as all available terrain and obstacle information is studied and all available lighting is used. Consideration must be given for the use of parachute flares or prepositioning other forms of lighting. Running takeoffs and landings will only be made to a runway or taxiway that is clearly discernible by lights. On all other missions (training, routine operational, or test missions, etc.), landings into remote and operational sites between official sunset and official sunrise are permitted if the mission is authorized and accomplished according to an approved night vision goggle (NVG) program or under the following conditions: the area is outlined by discernible lights or parachute flares, the pilot is familiar with the landing area through review of the site folder, and a daytime landing or overflight is accomplished, if feasible.

5.13.3.1. Use of vision restricting devices during takeoffs and landings is approved when required by a test plan. Observers will be pilot qualified in the aircraft flown, have direct access to the flight controls, have full view of the flight instruments, and be able to see outside.

5.14.2. Guidance for practicing emergency procedures is contained in AFI 11-2FT Vol 3 and the MDS specific attachments. The DFO may approve exceptions only when required as part of an approved test plan. Document approval in the test plan or flight authorization.

5.14.3. (Added) The DFO may allow a Federal Aviation Administration (FAA) flight examiner (FE) to observe pilot or flight engineer performance for an airline transport pilot or flight engineer qualification evaluation given as part of an Air Force checkride. The FAA FE will occupy an observer position only. All restrictions of this supplement apply. Field units will retain a copy of the written approval for 2 years.

5.15.2. Touch-and-go landings are authorized in any command operated aircraft provided all requirements of AFI 11-2FT Vol 3 and AFI 11-2FT Vol 1 are met.

5.16.1. Parachutist airdrops will be conducted according to AFI 11-410, *Personnel Parachute Operations*. Other airdrops will be conducted under approved test plans or locally developed procedures.

5.17.1. Reduced or light-out operations within restricted and warning areas are approved for AFMC aircraft when operational or test requirements dictate. DFOs will establish policies for such lighting in the unit supplement to AFI 11-2FTv3.

5.17.1.1. When operating outside restricted or warning areas, one aircraft in the formation will display appropriate lighting. Others may operate with reduced lighting as safety, operational and test conditions permit.

5.18. **Aerobatics and Air Combat Tactics.** Air Combat Tactics will adhere to guidelines of AFI 11-2FT Volume 3. Aerobatic maneuvers will not be performed below 5,000 feet AGL. Exception: Flight maneuvers approved according to AFI 11-209, *Air Force Participation in Aerial Events*, as part of an authorized air show.

5.21. **Landing with Hot Armament.** Units that conduct operations with live armament will publish procedures for live/hung ordnance in the unit supplement to this instruction and/or in-flight guide.

5.21.3. (Added) Aircraft will not be delivered to a contractor facility with hot armament on board unless delivery is specifically required by the contract and approved by the cognizant contract administration office.

5.22.2. When mission requirements and crew workload permit, aircrews will file air reports for extended over water flights when actual weather encountered is significantly different from forecast.

5.23.1. Missions requiring planned penetration of a thunderstorm require HQ AFMC/DO approval.

5.23.3. Thunderstorm avoidance procedures are listed in AFI 11-2FT Vol 3.

5.26. **Night Vision Goggles (NVG) Operations.** Operations and training requirements for NVG operations are specified in AFI 11-2FT, Volumes 1 and 3.

5.28. **Night Approaches.** When operating in night VMC, except when mission or training requirements dictate otherwise, aircrew will land using precision glidepath guidance. This glidepath guidance can either be from a precision instrument approach or from an approach lighting system. Acceptable types of glidepath guidance are contained in AFMAN 11-217, Volume 1, Chapters 14 and 15. Aircrew should complete a thorough review of the point of intended landing and the surrounding terrain and obstacles prior to arrival.

6.2. **Personal and Survival Equipment.** AFI 11-301AFMC Sup1, *Aircrew Life Support Program*, prescribes wear and use of personal and survival equipment.

6.2.2. Seat and Safety Belt Requirements. Refer to AFI 11-2FT Vol 3.

6.2.7. Pressure Suit Flight Requirements. Refer to AFI 11-2FT Vol 3

6.4.5.2. When any occupant of the aircraft lacks functional oxygen equipment, mission planning should consider recovery at a suitable airfield in the event of a loss of cabin pressurization.

8.1. **IFR Requirements.** Accomplish depot and flight test flights during day VMC to the greatest extent possible. Refer to AFI 11-2FT Vol 3 for more specific weather requirements.

8.1.1.1. Cat II and Cat III operations in IMC below Cat I minimums are restricted to approved test plans only. Certification will be handled on a case by case basis. Submit requests to HQ AFMC/DOV.

8.1.2.2. AFMC crews are authorized to conduct practice instrument approaches under VFR.

8.1.3. (Added) Military Accepts Responsibility for Separation of Aircraft (MARSA). The unit DFO is authorized to develop agreements for special IFR operations according to the MARSA concept. See FAA Handbook 7610.4, Special Military Operations, and FLIP for further guidance.

8.3.1.1.1.4. Approval of Non-DoD/NOAA and Local Use Procedures. Instrument procedures not published in either DoD or NOAA FLIP require a formal TERPS review, followed by AFMC/DO approval. The single point of contact for all requests is the AFMC TERPS office (HQ AFMC/DOA, DSN 986-0060, fax 986-1246). Submit requirements directly to the TERPS office (HQ AFMC/DOA) immediately upon mission notification. Minimum 15 days advance notice is desired. Instrument procedures are approved for specific missions, not blanket use. PICs will comply with restrictions and recommendations contained in the TERPS evaluation. Approval request must include airfield name/ICAO, desired procedure(s), copy of approach plate (or Jeppesen page number), mission date, POC and phone number.

8.4.3. A remote or island destination is defined as any aerodrome which, due to its unique geographic location, offers no suitable alternate (civil or military) within 2 hours flying time. Aircraft may hold at a remote or island destination, instead of designating an alternate airport, if all of the following conditions are met. There must be enough fuel on board, in addition to required reserves, to hold for at least 1 hour after arriving at the initial approach fix. From 1 hour before until 2 hours after estimated time of arrival, the worst weather is forecast to be at or above the alternate airport weather requirements for filing purposes. The forecast crosswind component corrected for runway condition reading (RCR) is within the recommended zone of the aircraft's landing crosswind chart.

8.6. **Takeoff Minimums.** Command takeoff alternate requirements for tanker/transport/bomber aircraft are listed in table 8.1. For fighter/trainer aircraft, the DFO may authorize takeoff for operational requirements when existing weather is below landing minimums if the visibility is at least 1,600 feet runway visual range (RVR) or 1/4-mile and a suitable alternate is located within 30 minutes flying time. The reported and forecast weather at the alternate must meet alternate airport weather requirements for filing purposes, and the forecast crosswind component corrected for RCR must be within the recommended zone of the aircraft's landing crosswind chart.

8.7.2.5. Missions requiring planned use of Jeppesen Special Departure Procedures require HQ AFMC/DOV approval.

8.13.2.2. For these circumstances, pilots may continue the approach as published to the missed approach point and may land if the aircraft is in a position to make a safe landing and the runway environment is in sight.

8.13.3. For other than Category II/III Instrument Landing System approaches, radar altimeters should be set to HAT/HAA (unless flight manual procedures direct otherwise). However, primary reference for MDA/DH is the barometric altimeter.

8.15. **IFR "VFR on Top.** The DFO may authorize IFR "VFR on Top" operations according to the provisions of FLIP, General Planning, if specific mission requirements dictate.

9.4.5. Time spent traveling (e.g., as a passenger or in a POV) to or from a TDY location to perform aircrew duties does not count as crew rest.

9.4.5.1. USAF TPS students will not be scheduled for events which would deny them 12 hours of crew rest. However, students may elect to use school facilities (i.e., computers, data reduction equipment and

audio-visual equipment) so long as it does not interfere with the opportunity for at least 8 hours of uninterrupted rest during the 12 hours immediately prior to the beginning of the flight duty period.

9.4.6. For deployed crews, FDP normally begins upon arrival to the aircraft unless crew briefing occurs earlier. Aircraft commanders should apply judgment to adjust FDP start time to unique situations such as lengthy travel times from billeting. The crew chief is responsible to the pilot in command when deployed. IAW AFI 21-101, the pilot in command will determine how long the crew chief can safely perform aircraft maintenance actions. As a minimum, the crew chief must have the opportunity to sleep 8 hours in each 24-hour period.

Table 9.1. Maximum Flight Duty Periods (Hours). Note 3. To minimize risk due to fatigue, supervisors at all levels may further restrict crew duty day for events such as flight test, practice takeoffs, emergency procedures, air refueling, low level operations, low approaches, touch-and-go landings, or night operations.

9.10.1. AFMC/DO authorizes unit DFOs to extend the flight duty period, as outlined in this chapter, up to 2 hours. The PIC is not authorized to extend flight duty period. For all other waivers to this chapter forward the request to HQ AFMC/DOV.

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